

GEOTHERMAL TECHNOLOGIES OFFICE

Play Fairway Analysis Phase II: Projects Selected for Continued Funding

Selected Project	City	State	Phase I Project Highlights	Preliminary
	,		, 5 5	DOE Share
				for Phase II
Nevada Bureau of Mines and Geology, University of Nevada, Reno	Reno	NV	 Ranked heat and permeability data subsets to define geothermal play fairways in west-central to eastern Nevada Applied statistics based on known high-temperature geothermal system benchmarks to weight hierarchal parameters Developed permeability and overall geothermal potential predictions for study area, as displayed on geothermal play fairway and favorability maps 	\$825,000
Utah State University	Salt Lake City	UT	 Compiled data related to heat source, reservoir and recharge permeability, and cap/seal for the Snake River Plain Created process to convert data layers to evidence and confidence layers, which were then used to derive risk maps for heat, permeability, and seal Identified 8 favorable areas with multiple prospects including: Kuna-Marsing, Mountain Home, Castle Creek-Bruneau, Deadman Flat, Camas Prairie-Mount Bennett Hills, King Hill, Banbury, Arco Rift, and Blackfoot 	\$664,971
University of Hawaii	Honolulu	Hawaii	 Compiled and integrated existing data to produce a comprehensive statewide geothermal assessment—the first since 1985 Ranked legacy and current datasets in terms their of ability to indicate subsurface heat, permeability, and fluid Produced a statewide map of geothermal resource probability, and a map of confidence in this probability 	\$720,000
Ruby Mountain Inc.	Salt Lake City	UT	 The project compared two methods - deterministic and stochastic – for purposes of creating a geothermal play fairway analysis for the Tularosa Basin In total, twelve plays were identified and then ranked by the level of certainty (e.g. Identified plays with a greater level of certainty were ranked higher) The highest ranking play is on Fort Bliss' McGregor Range in Otero County, New Mexico 	\$711,200
University of Utah/EGI – Great Basin	Salt Lake City	UT	 Assessed heat and permeability potential in the Eastern Great Basin Developed a favorability map Identified prospects near Roosevelt Hot Springs, Twin Peaks, Crater Knoll, and Pavant Butte 	\$720,000
Washington Division of Geology and Earth Resources	Olympia	WA	 Developed detailed models of heat and permeability potential at 3 sites in the Washington Cascade Mountain Range. Combined heat and permeability models to look at favorability and risk at 200m and 3km depth. Areas of interest for continuing work are: southeastern Mount Baker, the northern and southern Mount St. Helens seismic zone, and the Wind River valley 	\$452,810